

ABSTRACT OF THE DISCLOSURE

A light active device includes a semiconductor particulate dispersed within a carrier material. A first contact layer is provided so on application of an electric field charge carriers having a polarity are injected into the semiconductor particulate through the carrier material. A second contact layer is provided so on application of the electric field to the second contact layer charge carriers having an opposite polarity are injected into the semiconductor particulate through the carrier material. The semiconductor particulate comprises at least one of an organic and an inorganic semiconductor. The semiconductor particulate may comprise an organic light active particulate. When constructed as a light emitting device, an electric field applied to the semiconductor particulate through the carrier causes charge carriers of opposite polarity to be injected into the semiconductor particulate. The charge carriers combine to form carrier pairs which decay and give off light.

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